

PATENT CLAIMS

1. A folding top for a cabriolet vehicle, comprising
a first roof part (1), the first roof part (1) resting upon an openable rear element (10) in a closed state of the folding top,
a second roof part (2), which is mounted in a pivotable manner on the vehicle, the second roof part (2) being arranged in front of the first roof part (1), as seen in the direction of travel, when the folding top is closed,
a third roof part (3), the third roof part (3) being arranged in front of the second roof part (2), as seen in the direction of travel, in a closed state of the folding top,
it being possible for the first roof part (1) to be raised up from the rear element (10), characterized in that the third roof part can be displaced over the second roof part.
2. The folding top as claimed in claim 1, characterized in that the third roof part (3) and the first roof part (1) are connected to one another by a positive control means.
3. The folding top as claimed in claim 1 or 2, characterized in that the first roof part is mounted in a movable manner on the second roof part.
4. A folding top for a cabriolet vehicle, comprising
a first roof part (1), the first roof part (1) resting upon an openable rear element (10) in a closed state of the folding top,
a second roof part (2), which is mounted in a pivotable manner on the vehicle, the second roof part (2) being arranged in front of the first roof part (1), as seen in the direction of travel, when the folding top is closed,
a third roof part (3), the third roof part (3) being arranged in front of the second roof part (2), as seen in the direction of travel, in a closed state of the folding top,
it being possible for the first roof part (1) to be raised up from the rear element (10), characterized in that the third roof part (3) and the first roof part (1) are connected to one

another by a positive control means.

5. The folding top as claimed in claim 4, characterized in that the first roof part (1) is mounted in a movable manner on the second roof part (2).
6. A folding top for a cabriolet vehicle, comprising
a first roof part (1), the first roof part (1) resting upon an openable rear element (10) in a closed state of the folding top,
a second roof part (2), which is mounted in a pivotable manner on the vehicle, the second roof part (2) being arranged in front of the first roof part (1), as seen in the direction of travel, when the folding top is closed,
a third roof part (3), the third roof part (3) being arranged in front of the second roof part (2), as seen in the direction of travel, in a closed state of the folding top,
it being possible for the first roof part (1) to be raised up from the rear element (10), characterized in that the first roof part (1) is mounted in a movable manner on the second roof part (2).
7. The folding top as claimed in one of claims 1 to 6, characterized in that, when the folding top is in an open position, the third roof part (3) is arranged above the second roof part (2), and in that the first roof part (1) is arranged above the third roof part (3).
8. The folding top as claimed in one of claims 1 to 7, characterized in that the rear element (10) can be pivoted open counter to the direction of travel.
9. The folding top as claimed in one of claims 1 to 8, characterized in that, in a first stage of a folding-top opening movement, the first roof part (1) can be raised up from the rear element (10).
10. The folding top as claimed in one of claims 1 to 9, characterized in that the first roof part (1) rests on the rear element (10) with sealing action from above when the folding top is closed.

11. The folding top as claimed in one of claims 1 to 10, characterized in that the third roof part (3) can be pivoted essentially parallel over the second roof part (2).
12. The folding top as claimed in one of claims 1 to 11, characterized in that the third roof part (3) can be secured in a releasable manner on a windshield frame (7) of the vehicle when the folding top is closed.
13. The folding top as claimed in one of claims 1 to 12, characterized in that the first roof part (1) is articulated, by means of a first roof-part link (1a) and a second roof-part link (1b), on a coupling link (2a) which is fixed to the second roof part (2), the first roof part (1), the first roof-part link (1a), the second roof-part link (1b) and the coupling link (2a) forming a roof-part four-bar mechanism (1c).
14. The folding top as claimed in claim 13, characterized in that the roof-part four-bar mechanism (1c) can be pivoted for driving action by means of a drive device (11) in relation to the second roof part (2).
15. The folding top as claimed in claim 13 or 14, characterized in that the third roof part (3) is connected in an articulated manner to the coupling link (2a) via a first front link (3a) and a second front link (3b), with the result that a front four-bar mechanism (3c) is formed by the coupling link (2a), the first front link (3a), the second front link (3b) and the third roof part (3).
16. The folding top as claimed in claim 15, characterized in that a control link (8) connects the front four-bar mechanism (3c) and the roof-part four-bar mechanism (1c) to one another in an articulated manner, a first positively controlled link chain being formed by the front four-bar mechanism (3c), the roof-part four-bar mechanism (1c) and the control link (8).
17. The folding top as claimed in claim 16, characterized in that the positively controlled link

chain forces the first roof part (1) and the third roof part (3) to move in opposite directions with respect to each other.

18. The folding top as claimed in one of claims 1 to 17, characterized in that a first main link (4) and a second main link (5) is provided, the first main link (4) and the second main link (5) being connected in an articulated manner in each case to a bodywork-mounted main-bearing unit (6), the second roof part (2) connecting the first main link (4) and the second main link (5) in an articulated manner to give a main-link mechanism (9) which forms a second positively controlled link chain.
19. The folding top as claimed in claim 18, characterized in that a force-introduction unit (6a) is provided, it being possible for the main-link mechanism (9) to be pivoted for driving action by means of the force-introduction unit (6a).
20. The folding top as claimed in one of claims 1 to 19, characterized in that the first roof part (1) comprises a solid rear window (1d).
21. The folding top as claimed in one of claims 1 to 12, characterized in that the first roof part (101) can be pivoted up in the direction of travel, in the first instance, about an axis of rotation (112), the axis of rotation (112) being arranged in a rear end region of the second roof part (102).
22. The folding top as claimed in claim 21, characterized in that a drivable base link (200) is mounted in a movable manner on the second roof part (102).
23. The folding top as claimed in claim 22, characterized in that the base link (200) forms the base of a roof-part four-bar mechanism (101c), a first roof-part link (101a) and a second roof-part link (101b) being provided in addition, and the first roof part (101) forming the connecting rod of the roof-part four-bar mechanism (101c).
24. The folding top as claimed in claim 23, characterized in that a control link (201) connects

one of the roof-part links (101a, 101b) in an articulated manner to a main link (104, 105) of the folding top.

25. The folding top as claimed in one of claims 21 to 24, characterized in that the third roof part (103) is mounted on the second roof part (102) by means of a sliding guide.
26. The folding top as claimed in one of claims 1 to 20, characterized in that a positive control means (304) is provided, it being possible for the first roof part (302) and the third roof part (301) to be moved relative to one another by the positive control means (304), and the positive control means (304) comprising a mechanical control device (306), it being possible to delay the movement of the third roof part (301) and of the first roof part (302) in relation to one another by means of the control device (306).
27. The folding top as claimed in claim 26, characterized in that the first roof part (302) and the third roof part (301) can be moved drivably by means of a common force-introduction unit (305) via the positive control means (304).
28. The folding top as claimed in claim 27, characterized in that the control device (306) comprises a rotary link (307).
29. The folding top as claimed in claim 28, characterized in that the rotary link (307) can be driven by the force-introduction unit (305).
30. The folding top as claimed in claim 28 or 29, characterized in that the rotary link (307) is connected to the third roof part (301) by a first linkage (308), and in that the rotary link (307) is connected to the first roof part (302) by a second linkage (309).
31. The folding top as claimed in one of claims 26 to 30, characterized in that the third roof part (301) is connected to the second roof part (310) via a front four-bar mechanism (311), and in that the first roof part (302) is connected to the second roof part (310) via a rear four-bar mechanism (312).

32. The folding top as claimed in claim 31, characterized in that the second roof part (310) is connected to the bodywork (303) of the vehicle via a main-link mechanism (313).
33. The folding top as claimed in claim 31 or 32, characterized in that an outside link (311a) of the front four-bar mechanism (311) is aligned adjacent the outside of the second roof part (310) when the folding top is closed.
34. The folding top as claimed in claim 33, characterized in that the outside link (311a) is connected to the second roof part (310) via a small four-bar mechanism (320).
35. The folding top as claimed in one of claims 26 to 34, characterized in that the control device (306) comprises a rotatable control plate.
36. The folding top as claimed in one of claims 1 to 35, characterized in that the second roof part (2, 102, 310) is mounted in a pivotable manner on the vehicle by means of a positively controlled link chain when the folding top is closed.
37. The folding top as claimed in one of claims 1 to 36, characterized in that the third roof part (3, 103, 301) is a hard shell part which extends transversely to the direction of travel over the entire width of the vehicle.